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A Possible Return of Texas Palmettos to Waller Creek — Pure Speculation

The Austin area has a number of old Texas Palmettos (*Sabal mexicana*), some over 40 feet tall, and over a hundred years old. But to my knowledge all these have been introduced as decorative landscaping.

Photo thanks to Landon Lockett

In recent years Landon Lockett, a former University of Texas linguist turned botanist, has discovered historical documentation that palms, possibly Texas Palmettos, grew natively as close as San Antonio in 1716, as recorded by a Mexican priest. Lockett makes a convincing case that these were not the more familiar Central Texas Dwarf Palmettos (*S. minor*). The original San Antonio palms seem to have disappeared, but Texas Palmettos are now abundantly represented along the San Antonio River, as escapees from introduced *S. mexicana*. (I highly recommend Lockett's "Historical Evidence of the Native Presence of *Sabal mexicana* (Palmae) North of the Lower Rio Grande Valley, *Sida*, Vol. 16, No. 4 (1995), pages 711–719.)

Lockett also argues (Lockett & Read, "Extension of Native Range of *Sabal mexicana* (Palmae) in Texas to include Central Coast," *Sida*, Vol. 14, No. 1 (1990), pages 79–85.) for the native status of the *S. mexicana* population at Garcitas Creek near Matagorda Bay. The authors bring to light historical evidence that tall palms in that area were originally noted in the late 17th Century by French explorer Henri Joutel, and again by German botanist Ferdinand Lindheimer in 1845.

But unfortunately there is no physical evidence to support Lockett's argument that these early tall palms were specifically *S. mexicana*, only that they were not *S. minor*, the only other apparent option at the time the articles were written. The possibility that these palms may have been another Texas species, one no longer present in that area — perhaps now extinct — can't be ruled out. Some 50 miles up the coast, in nearby Brazoria County, is a unique population of trunked *Sabal* palms, *Sabal* × *brazoriensis*. Not far to the east of San Antonio, in southern Fayette County, in a watershed that drains into Mategorda Bay, there is a well established escaped wild tall palmetto population. These populations are definitely not *S. mexicana*, and represent a species yet to be determined.

San Antonio Palmetto Possibilities

Mulberry Creek Palmettos in Praha

That the robust growth of *S. mexicana* along Waller and Shoal Creeks, as well as along the Colorado River, reflects an evolutionary predisposition to grow in just this environment seems to be supported by Robert Read in his "Ecology of Palms" (1974, p. 40):

> My experience leads me to the conclusion that most genera and species of palms are highly specific and narrow in their individual tolerances. ...when dealing with palms it is important to keep in mind that closely allied species may be isolated from one another simply by a change in soil, water, or light relationships.

And consequently the many Texas Palmettos along our local creeks might perhaps be seen as the return of an earlier resident species, conceivably eliminated by the last ice age, when most palms were forced to 'retreat' to the south (although perhaps only as far as San Antonio).

Lockett has reported (personal communication) that the highly respected field botanist Bill Carr has similarly expressed the view that the *S. mexicana*,

> which is escaping all over the place in the mission area south of San Antonio, is native there. He doesn't think it would escape there so vigorously if it were not....

Of course, by this view, the same would seem to be true of the Praha palmettos, which exhibit an equally vigorous spread along the creeks and ditches in the vicinity of the mother palm at the Praha church. Lockett considers it to be an introduced *S. palmetto*, from Florida — but I think it is premature to rule out a Brazoria source for this palm.

30–year old plant

Volunteers under Ashe Juniper (after year of severe drought)

Brazoria Palmettos in N. Hays Co.

My more recent experience has led me to entertain the possibility that Brazoria palmettos may once have had a much more widespread territory. In 1977 I received a small Brazoria palmetto in a 1-gallon pot, which I immediately put in the ground on our undeveloped land in N. Hays County, near a spring, but with no subsequent care. In 30 years it has developed a 34–inch trunk and is 12 feet tall. But more significantly, in recent years it has produced some 168 (as of 2009) volunteer seedlings, some over 500 feet distant. During this same period I have not had any success introducing *S. mexicana* seedlings into the ground. Most of these have not died, but growth has been weak at best.

In short, historical evidence of large palmettos in Texas does not, in my opinion, translate into support for a more northerly distribution of *S. mexicana*.

Blanco Co. Dwarf Palmetto

Dwarf Palmetto along lower Barton Creek

In this same vein, one might wonder why the Dwarf Palmetto (*S. minor*) does not seem to be prospering in our local Central Austin habitat. Lockett has observed (personal communication):

> My impression has been that we don't have *S. minor* escaping in Austin because it's not much planted here (compared to *S. mexicana*), although maybe I just haven't noticed cultivated *S. minor* because I haven't looked for it. ... but I've never seen a case of what was apparently *S. minor* escaping.

Perhaps one doesn't find *S. minor* volunteers around central Austin because the source plants are not from this area, but brought in from E. Texas (or even the East Coast) by nurseries; i.e., not adapted to this environment. And for similar reasons *S. minor* from the hill country, like our Texas Madrones, might not fare well east of the Balcones Escarpment — in town or to the east in Palmetto Park (Gonzales County). Although there are well-established populations of *S. minor* on the upper tributaries of Barton Creek, there are very few on lower stretches of the creek; e.g., between Loop 1 and the Colorado River.

A final speculation on possible sources for the San Antonio Springs palmettos — perhaps 'native' because they were in place at the arrival of the first Europeans to visit the region. The Coahuiltecan indians along the Rio Grande are known to have used palmetto leaves to build huts. I think one can safely assume that they also ate the fruits — although I was unable to document any direct mention of this in anthropological studies. I have to wonder whether the San Antonio palms could at one time have been introduced from fruits carried from the Lower Valley by Coahuiltecans. It may one day be possible to establish this with DNA evidence from materials collected at archeological sites.

But simply introducing fruits from outside a species' range would not have sufficed to establish a population. The Coahuiltecan's could have been restoring the species to an area for which it had been adapted, even though it might have disappeared long before the arrival of European settlers.